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(54) **MODULAR DATA STORAGE SYSTEM FOR REDUCING MECHANICAL SHOCK AND VIBRATIONS**

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(*) Notice: This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(58) **Field of Search** 361/725, 724, 361/726, 727, 683, 684, 685, 753, 754, 756, 759, 788, 787, 801, 802; 439/59, 61, 62, 64; 70/85; 312/223.1, 223.2; 211/41.17; 206/701, 707

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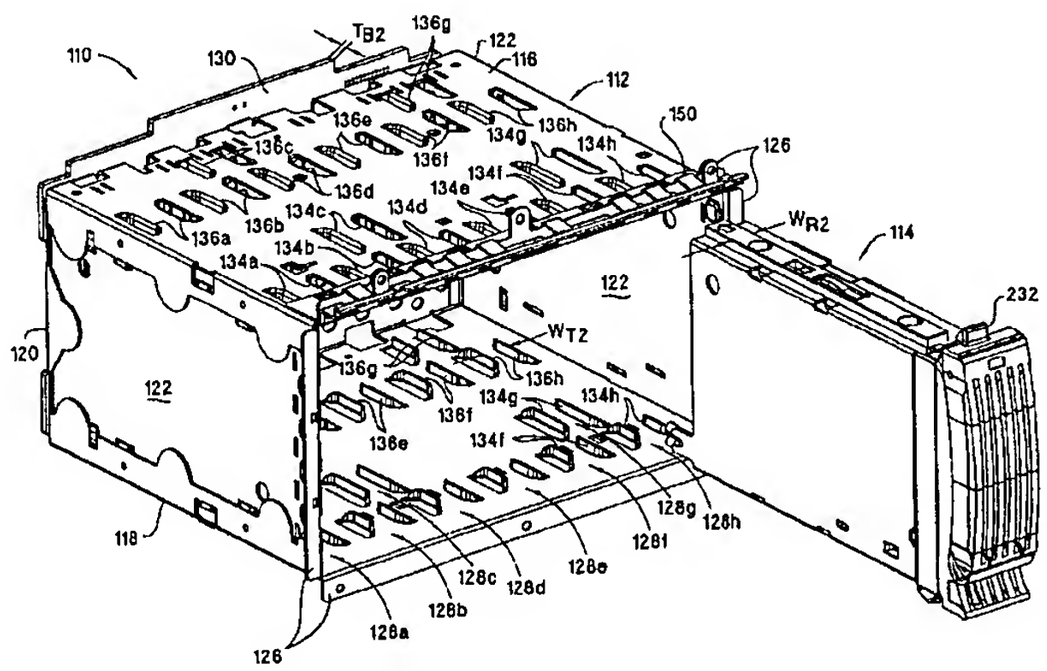
(57) **ABSTRACT**

The present invention provides a modular data storage system that can constraint movement of a data storage module within an enclosure during operation, handling, and transportation. The present invention achieves the objective by employing compliant features at strategic locations in the data storage system by utilizing shock/vibration isolators and the frictional forces generated by the compliant elements to introduce damping effects. In addition, this invention provides a locking mechanism that will allow the user to smoothly insert, remove and firmly grip a data storage module.

16 Claims, 11 Drawing Sheets



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